

Mission to Titan

SCRIPT:

What would it be like to parachute down to another world, an orange world, with rivers and lakes, clouds and rain? Well, believe it or not, we've already landed on such a world, almost a billion miles away from Earth.

The encounter was part of the Cassini mission to Saturn. It took the Cassini spacecraft seven years to get there, and begin a study of Saturn. And then, in January, 2005, it released a small space probe on a mission to explore Titan, the most mysterious moon of Saturn – a giant moon with a thick orange atmosphere. Using special cameras, we could see through the clouds, that there was a very interesting world underneath. And now a probe, in the shape of a flying saucer from Earth, was on its way to the surface.

Microphones recorded the sound of an alien wind, blowing on another world. Then, the probe dropped through the clouds, and began to take pictures – at first, fuzzy pictures. And then, there! River channels! It looks like a huge river! Another picture.. It looks like the shoreline of a lake! It looks so much like Earth! And yet, Titan is a very different world. Instead of rock, it's made of ice. Instead of liquid water, liquid methane flows in the rivers. And the temperature is 300° F. below zero.

When the probe finally landed, it took one more picture, sitting on a dry river bed, a billion miles from Earth. Here is a world so different, but more like our own than we ever dreamed would exist here.. among the moons of Saturn.

For scientists, it's only the beginning of a journey that will take us to many other worlds. Perhaps some will have oceans. Perhaps some will be like Earth. And perhaps some, across the far reaches of space, will be beyond our imagination.

Relevant NSES Standards

NSES Content Standard A: Understanding about scientific inquiry.

(Grades 9-12) New technologies provide new evidence.

NSES Content Standard D: Earth and space science.

(Grades K-4) Objects in the sky. Planets.

NSES Content Standard E: Understanding about science and technology.

(Grades 5-8) Technology provides better instruments for science.

(Grades 9-12) Science often advances with introduction of new technology.

NSES Content Standard F: Science in social perspectives.

(Grades 5-12) Society's interest can direct scientific inquiry.

(Search for life on other worlds.)

Credits: Dr. Amanda Hendrix, Cassini Project Team, NASA JPL

Dr. Robert H. Brown, Cassini Team Leader, University of Arizona

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